

LXV.—*Preliminary Descriptions of some new Species and Subspecies of Indo-Malayan Sphingidæ.* By Lord ROTHSCHILD, F.R.S.

THESE Sphingidæ form part of collections sent to the British Museum by Major F. B. Scott and Mr. C. J. Brooks.

1. *Ambulyx liturata obliterata*, subsp. n.

♂. Differs from *l. liturata* in its much paler coloration and the almost complete obliteration of the minor markings of the fore wings and the great reduction of the markings of the hind wings. Head, thorax, and abdomen much paler, buffish not so vinaceous as in *l. liturata*. Fore wings stramineous buff, tinged with rosy cinnamon, not vinaceous brown as in the typical form; the rufous-brown bands on veins 4, 6, and 7 absent and the rest of the nervures much less distinct, the dark bands running in from costa absent, only the one crossing vein 6 slightly indicated, the olive patch on vein 1 and the smaller one above vein 2 both very much larger than in *l. liturata*; subternal patch larger, better defined vinaceous mauve, and without the streaks present in *l. liturata*. Hind wing paler, yellower, less suffused with rufous, the red freckling and median band much reduced.

*Hab.* Lebong-Tandai, Benkoelen District, Sumatra, 1912-1919 (C. J. Brooks); 1 ♂.

2. *Oxyambulyx pryeri sumatranus*, subsp. n.

♀. Differs from *pryeri pryeri* in the presence strongly marked of a crenulate median black band and an ante-median angled line from cell to inner margin. The black basal patch and the black transverse bands on hind wing are also more strongly developed.

*Hab.* Lebong-Tandai, Benkoelen District, Sumatra, 1912-1919 (C. J. Brooks); 1 ♀.

3. *Clanis brooksi*, sp. n.

♂. Nearest to *bilineata*, Walk., and *stenosma*, Rothsch. & Jord., but apparently much larger; this ♂ having the fore wing 70 mm., equalling the ♀ of *stenosma*, and as in all the known species the ♀ ♀ are larger than the ♂ ♂, the ♀ ♀ of *brooksi* will probably prove to be much larger. The pale area running in from the costa on fore wing much longer than in *bilineata*, but not so long as in *stenosma*, not reaching second line, first and second lines much straighter, not angled and crenulated. Black area of hind wing less extended

towards apex, pale areas of abdominal and distal margins greyish olivaceous brown. Body and wings above with whole ground-colour olivaceous, not ochraceous. Below fawn-olive, broad basal area below median nervure of fore wing deep blackish brown.

Length of fore wing 70 mm.; expanse 155 mm.

*Hab.* Lebong-Tandai, Benkoelen District, Sumatra, 1912-1919 (*C. J. Brooks*); 1 ♂.

#### 4. *Marumba cristata titan*, subsp. n.

♀. Very much larger and darker than *cr. cristata*; the bands on the fore wing are much broader and the four basal ones wider apart. Ground-colour deep sooty grey-brown with a purplish violet suffusion, with no rufous or sandy tinge whatever. The subternal spot on fore wings is very large and broadly ringed with orange. Abdominal area on hind wings grey.

Length of fore wing, ♀ *cristata cristata*, 60 mm.; expanse 132 mm.

Length of fore wing, ♀ *cristata titan*, 74 mm.; expanse 163 mm.

*Hab.* Lebong-Tandai, Benkoelen District, Sumatra, 1912-1919 (*C. J. Brooks*); 1 ♀.

#### 5. *Marumba scotti*, sp. n.

♂. Nearest to *sperchius gigas*, Butl., but smaller, at once distinguished by its grey colour, the sandy and buff tints being entirely absent, and by the presence of an extra oblique band from costa passing through the stigma and joining band 4 on vein 1, where they stop short. Band 5 and the following shadow band are much closer to the stigma than in *sp. gigas*. Hind wing deep brown washed with grey, and nervures chestnut; margins much less crenulated.

Length of fore wing 43 mm.; expanse 98 mm.

*Hab.* Shillong, Assam, 1919 (*Major F. B. Scott*).

"The larvæ were common in Shillong (Khasia Hills) during July and August 1919, feeding on Spanish Chestnut and a species of Oak. I did not find the egg.

"The larva is coloured as follows:—Head and body green varying from apple-green to nearly white. A whitish stripe on either side of front of head ending in two short points. Head and body dotted with white tubercles, sometimes with reddish points. A whitish lateral stripe on the first to the third segments and seven oblique stripes, whitish edged above with dark green, on the usual segments. The lower portion of the anterior oblique stripe widens out into an irregular quadrate spot. A white ventral [?lateral, *R.*] stripe from

the fourth segment to the anal claspers. Horn dark green, straight and tuberculate. Spiracles blue. Length full-grown 4 inches = 100 mm. Before pupating the larva turns pink. The pupa has a rough shagreened surface, is brown, and has two small projections to the head. Two moths emerged in August 1919, the remainder are still (Feb. 1920) in the pupal stage.

"This larva is often attacked by small black flies. I counted as many as ten on a single larva; but apparently they do not cause any injury, as this particular larva produced a perfect moth."—*F. B. S.*

#### 6. *Cechenena scotti*, sp. n.

♂. This very beautiful species is unlike any other of the genus.

Antennæ above milky white shading into pink basad; palpi orange-buff, third joint pale olive; head deep green, bordered broadly by pinky greyish white; thorax deep green, patagia (rectius tegulæ) bordered with silver-grey and with an obsolescent orange streak in the centre, centre of thorax pale pinkish grey; abdomen, basal two segments above deep green, rest of abdomen above slightly paler and more olive, mixed here and there with bronze; dorsum with two broad pinkish silver-grey lines, within which are two narrow hair-lines of same colour and a broad median band dark green on basal one-third and bronze for rest of its length; anal tuft olive-green mixed with grey. Fore wing: ground-colour pinkish buff-grey, basal half below stigma rosy pink; basal one-fifth of costa and basal three-fifths of wing above median nervure dark green, within which is a black stigmatic dot. Below the green area from inner margin to costa before apex run two indistinct, partially obliterated, faint olive oblique lines; from inner margin beyond these to apex is a heavy double oblique dark green band, and beyond this and between it and the termen are several ill-defined waved dark green lines and cloudings. Hind wing: basal half irregularly black, rest of wing pale pinkish buff suffused with black, which suffusion forms a broad outer terminal band, leaving tornal half of disc almost without suffusion.

Length of fore wing 36 mm.; expanse 82 mm.

*Hab.* Mussoorie, 1918 (*Major F. B. Scott*).

"At Mussoorie in August 1918 I found several eggs on Virginian Creeper. These eggs were green and spherical. Before hatching they turned white. The newly hatched larva was greenish yellow with a very long black horn, and the body smooth and cylindrical.

"After the first moult the head was yellow, the body green,

long and thin, swollen at the fifth segment; horn long and straight, brown with tip black and white. Towards the end of this stage an ocellus appeared on the swollen fifth segment, green centre ringed with white and black.

"After the second moult the head and body were green; the fifth segment much swollen and coloured pink, with the ocellus coloured as before. Horn purple, anal segment and underside pink. After third moult the head was green, and body yellowish green; the fifth segment still more swollen brick-red, with the ocellus blue in front, reddish behind, the reddish portion dotted with yellow, the whole ringed with white and black. A lateral stripe on third and fourth segments brick-red; the dorsal line, the lateral segmental oblique stripes on segments 6-12, and the subdorsal spots also brick-red. Legs, prolegs, and underside brick-red. Horn curved downwards, yellow closely dotted with black.

"After fourth moult there were two forms, a green and a brown. The green form was coloured as follows:—Head and body to fifth segment green, remaining segments dorsally white, green laterally and below with dark green strigæ. A green dorsal line; a pale lateral line, edged above on third and fourth segments with green. An ocellus on the swollen fifth segment, dark blue in front, green behind, with two white spots in the green portion, ringed in front with blue, behind with yellow, the whole outwardly ringed with green. A light-coloured waved subdorsal line, and light oblique stripes edged with green on segments 6-12. Legs pink with white bands, prolegs and claspers green. Spiracles ochreous. Horn purple and curved down.

"Length  $3\frac{1}{2}$  inches = 89 mm.

"The brown form was marked identically the same, but coloured pale and dark brown instead of dark and light green.

"The pupa was contained in a slight cocoon near the surface of the soil. Head, thorax, and wing-cases dark brown with paler markings, the wing-cases having rows of raised black dots. A black circular flattened sheath in front of head. Abdomen brown-pink, with a dark dorsal stripe and dark strigæ. Spiracles black.

"Length 49 mm."—*F. B. S.*

7. *Cechenena lineosa subangustata*, subsp. n.

♂. Differs from *lin. lineosa*, Walk., in the buff subterminal band on the hind wings being very much narrower.

*Hab.* Lebong-Tandai, Benkoelen District, Sumatra, 1912-1919 (*C. J. Brooks*); 1 ♂.

I hope later to give detailed accounts of the genitalia and other structures.